FEB 2009

Kansas Agriculture Education **Advance Animal Science**

AGRICULTURE COURSE PROFICIENCIES	Equine Science
Student name:	**Instructor name:**
Student #:	**Enrollment date:**
Student Signature:	**Credit/Non-Credit:**
RATING SCALE: 3 Skilled - Works independently 2 Limited skill - Requires assistance to perform task 1 Skill undeveloped – Received instruction but has not developed skill 0 No Exposure – No instruction or training in this area	**DIRECTIONS: Evaluate the student by checking the appropriate number to indicate the degree of competency reached. I CERTIFY THAT THE STUDENT RECEIVED TRAINING IN THE AREAS INDICATED.**

A. BREEDS, TYPES, AND CLASSES OF HORSES

3 2 1 0 1. Understand how horse breeds started with foundation stallions
3 2 1 0 2. Understand the concept of breed, types, and classifications
3 2 1 0 3. Describe the common height measurement for horses
3 2 1 0 4. Define the terms warmblood, coldblood, cob and back
3 2 1 0 5. Name ten common breeds of light horses and their origin
3 2 1 0 6. Name five common breeds of draft horses and their origin
3 2 1 0 7. Name five common breeds of ponies and their origin
3 2 1 0 8. List five color breeds of horses

B. SELECTING AND JUDGING HORSES

3 2 1 0 1. Have knowledge of ten factors to consider when selecting a horse to purchase
3 2 1 0 2. Understand how expected use influences the selection of a horse
3 2 1 0 3. Understand why the age and sex of a horse are important considerations in selecting a horse
3 2 1 0 4. Understand why conformation is a more important consideration than breed when selecting a horse
3 2 1 0 5. List five steps in judging a horse
3 2 1 0 6. Know the views used and traits looked for in judging the conformation of a horse
3 2 1 0 7. Be able to list the terms used to describe common body colors of horses
3 2 1 0 8. Understand why the proper selection of a horse is so important

C. FUNCTIONAL ANATOMY

3 2 1 0 1. Know the nine systems of animals and the major organs that make up each system
3 2 1 0 2. Understand the functions of the skeletal, muscular, digestive, urinary, respiratory, circulatory, nervous, reproductive, and endocrine systems
3 2 1 0 3. Identify the components of the skeletal, muscular, digestive, urinary, respiratory, circulatory, nervous, reproductive, and endocrine systems
3 2 1 0 4. Know the five divisions of the vertebral column
3 2 1 0 5. Name the bones in the foreleg and hindleg
3 2 1 0 6. Describe three types of joints
3 2 1 0 7. Identify three types of muscles and their locations in the body
3 2 1 0 8. Trace the circulation of blood through the body
3 2 1 0 9. Identify the endocrine glands and the hormones they secrete

D. DIGESTION AND NUTRITION

3 2 1 0 1. Know six categories of nutrients
3 2 1 0 2. Define terms associated with energy
3 2 1 0 3. Understand each of the six energy nutrients
3 2 1 0 4. List the sources of energy nutrients
3 2 1 0 5. Describe the functions of the energy nutrients
3 2 1 0 6. Describe the symptoms of energy nutrient deficiencies
3 2 1 0 7. Explain the temperature and how it is important in horse management
3 2 1 0 8. Describe the energy needs of horses for milk production, pregnancy, and work
3 2 1 0 9. List the most important compound sugars
3 2 1 0 10. Describe the digestion of fiber
3 2 1 0 11. Describe the function of protein
3 2 1 0 12. Describe digestible protein

E. FEEDS AND FEEDING HORSES

3 2 1 0 1. Identify and describe sources of hay
3 2 1 0 2. List and describe sources of concentrates
3 2 1 0 3. Describe how to feed roughages and concentrates
3 2 1 0 4. Name and describe sources for protein
3 2 1 0 5. Explain how horses are fed according to their activity level
3 2 1 0 6. Make feeding recommendations or management suggestions
3 2 1 0 7. Describe some typical rations for horses at different stages and activity levels
3 2 1 0 8. Understand how to feed minerals
3 2 1 0 9. Identify sources of minerals

F. REPRODUCTION AND BREEDING

3 2 1 0 1. Understand breeding periods
3 2 1 0 2. List and discuss the major parts of the female reproduction tract
3 2 1 0 3. List and discuss the major parts of the male reproduction tract
3 2 1 0 4. Recognize fertility problems
3 2 1 0 5. Understand gestation and parturition in horses
3 2 1 0 6. Discuss and demonstrate methods of artificial insemination and heat etection
3 2 1 0 7. Describe the management of the mare and stallion prior to, during, and after the breeding season
3 2 1 0 8. Describe the management of the mare, including care of parturition, nursing to weaning, and growing to maturity

G. HEALTH MANAGEMENT

3 2 1 0 1. Define terms associated with disease conditions
3 2 1 0 2. Discuss disease resistance and immunity
3 2 1 0 3. Describe immunization
3 2 1 0 4. Discuss how a vaccination program relates to immunity
3 2 1 0 5. List signs of disease
3 2 1 0 6. Discuss common diseases caused by viruses
3 2 1 0 7. Discuss common diseases caused by bacteria
3 2 1 0 8. List five noninfectious diseases
3 2 1 0 9. Describe the signs of good health in a horse
3 2 1 0 10. List the objectives for first aid for horses

3 2 1 0 11. List four digestive diseases
3 2 1 0 12. List five respiratory diseases
3 2 1 0 13. Discuss laminitis and colic
3 2 1 0 14. Relate body condition to health

H. PARASITE CONTROL

3 2 1 0 1. Describe the life cycle of a typical parasite with an intermediate host
3 2 1 0 2. Describe the symptoms of a parasite-infected horse
3 2 1 0 3. List management techniques that help prevent parasite infections
3 2 1 0 4. Give the scientific names for five common parasites
3 2 1 0 5. Name the general categories of chemicals used to treat horses with parasites
3 2 1 0 6. Describe the life cycle and damage caused by strongyles and ascarids
3 2 1 0 7. Identify flying insects that are carriers of disease
3 2 1 0 8. List the parts of the digestive system that internal parasites may effect
3 2 1 0 9. Distinguish the different effects of mites, ticks, chiggers, and lice
3 2 1 0 10. Discuss why young horses are more severely affected by parasites than older horses

I. COMMON MANAGEMENT PRACTICES

3 2 1 0 1. Recognize stress in horses
3 2 1 0 2. Describe methods of marking and identifying horses
3 2 1 0 3. Discuss procedures for the neonatal foal
3 2 1 0 4. List methods of fly control
3 2 1 0 5. Describe common fly problems and the habits of several species
3 2 1 0 6. Understand the best management practices for pastures and forages
3 2 1 0 7. Describe wound types and their proper management
3 2 1 0 8. Understand the management considerations when weaning a foal
3 2 1 0 9. Understand the importance of records to the management of horses

J. SHOEING AND HOOF CARE

3 2 1 0 1. Describe the internal and external parts of the hoof
3 2 1 0 2. List steps in picking up a horse's feet
3 2 1 0 3. List five tools used in caring for a horse's feet
3 2 1 0 4. Understand why it is important to start foot care early in a horse's life
3 2 1 0 5. Know why trimming should be done carefully
3 2 1 0 6. Name common problems of the feet

K. BUILDINGS AND EQUIPMENT

3 2 1 0 1. Recommend an environment for horses that addresses welfare, safety, labor and cost
3 2 1 0 2. Identify the space requirements for a horse facility
3 2 1 0 3. Understand the importance of ventilation in a building housing horses
3 2 1 0 4. Name materials commonly used for stall floors
3 2 1 0 5. Understand the requirements for a horse stall
3 2 1 0 6. Provide guidelines for the selection of feed and water facilities
3 2 1 0 7. Understand reasons for fencing horses and how to select the right fence
3 2 1 0 8. Name four types of fences

L. EQUITATION

3 2 1 0 1. Name three styles of saddles and describe their uses
3 2 1 0 2. Indicate the four criteria for selecting a saddle
3 2 1 0 3. Describe the anatomical points on a horse that must be checked when considering a saddle
3 2 1 0 4. Understand the results of a poorly fitted saddle
3 2 1 0 5. Understand the effect of the rider's being forward or sitting back in the saddle has on the performance of a horse
3 2 1 0 6. Give the rules of safe riding

CAREER DEVELOPMENT SKILLS

I. LISTENING SKILLS

3 2 1 0 **1.** Follow oral instructions
3 2 1 0 a. Listen for and identify key words
3 2 1 0 b. Listen for words that identify a procedure
3 2 1 0 c. Listen for steps or actions to be performed
3 2 1 0 d. Listen for clues regarding the order or sequence
3 2 1 0 **2.** Distinguish fact, opinion, and inference in oral communication
3 2 1 0 **3.** Interpret nonverbal cues (eye contact, posture, gestures)
3 2 1 0 **4.** Analyze a speaker's point of view
3 2 1 0 **5.** Draw conclusions or make generalizations from another's oral communication
3 2 1 0 **6.** Restate or paraphrase a conversation to confirm what was said
3 2 1 0 **7.** Reduce barriers (or interference) that may impede effective listening

II. HUMAN RELATION SKILLS

3 2 1 0 **1.** Perform a self assessment
3 2 1 0 a. Personal needs
3 2 1 0 b. Standards and values
3 2 1 0 c. Needs/wants
3 2 1 0 d. Strengths/weaknesses
3 2 1 0 e. Interests/talents
3 2 1 0 **2.** Define the term "self-concept"
3 2 1 0 **3.** Demonstrate characteristics of a positive self concept
3 2 1 0 **4.** Identify defense mechanisms that are used to protect self-concept
3 2 1 0 **5.** Demonstrate interpersonal skills:
3 2 1 0 a. Tact and diplomacy
3 2 1 0 b. Respect for others
3 2 1 0 c. Respect for diversity
3 2 1 0 d. Recognition of other's strengths
3 2 1 0 e. Positive assertiveness
3 2 1 f. Positive attitude

III. DECISION MAKING/PROBLEM SOLVING

3 2 1 0 **1.** Describe the factors that impact on decision making:
3 2 1 0 a. Needs and wants
3 2 1 0 b. Values
3 2 1 0 c. Goals
3 2 1 0 d. Standards
3 2 1 0 **2.** Distinguish between types of decisions:
3 2 1 0 a. Economic
3 2 1 0 b. Technical
3 2 1 0 c. Social
3 2 1 0 **3.** Apply the steps in the decision making process
3 2 1 0 **4.** Utilize problem solving skills:
3 2 1 0 a. Identify the problem for resolution
3 2 1 0 b. Define critical issues
3 2 1 0 c. Analyze causes of a problem
3 2 1 0 d. Utilize research and assessment skills
3 2 1 0 e. Examine results of a problem
3 2 1 0 f. Offer solutions to a problem
3 2 1 0 g. Select a solution to a problem
3 2 1 0 h. Implement an action plan

IV. TEAMWORK

3 2 1 0 **1.** Participate in team tasks:
3 2 1 0 a. Establish team goals
3 2 1 0 b. Reconcile disputes and disagreements
3 2 1 0 c. Propose alternative plans for action
3 2 1 0 d. Respond positively to ideas and suggestions

3 2 1 0 e. Express agreement of neutrality
3 2 1 0 f. Demonstrate conflict resolution skills
3 2 1 0 g. Express disagreement diplomatically

V. RESOURCE MANAGEMENT

3 2 1 0 **1.** Identify and explain the use of common supplies for a given occupational area
3 2 1 0 **2.** Locate information and select the materials tools, or other resources to perform the activities needed to accomplish a specific task
3 2 1 0 **3.** Determine cost, time, and resources needed to complete a task within an industry or occupation
3 2 1 0 **4.** Explain the relationship between setting goals and managing money
3 2 1 0 **5.** Identify fixed and flexible expenses
3 2 1 0 **6.** Identify planned and impulse buying
3 2 1 0 **7.** Explain the purpose and use of the following:
3 2 1 0 a. Promissory note and bank draft
3 2 1 0 b. Purchase requisition and invoice
3 2 1 0 c. Inventory card
3 2 1 0 d. Petty cash voucher
3 2 1 0 e. Receipt and payroll register
3 2 1 0 f. Employee's withholding exemption form
3 2 1 0 g. Payroll check
3 2 1 0 h. Garnishment

VI. TIME MANAGEMENT

3 2 1 0 **1.** Identify influences on use of time
3 2 1 0 **2.** Set priorities or the order in which several tasks will be accomplished

ACADEMIC INTEGRATION

LANGUAGE ARTS

I. ORAL COMMUNICATIONS

3 2 1 0 **1.** Use proper techniques to make a formal oral presentation
3 2 1 0 **2.** Participate in group discussions for problem resolution
3 2 1 0 **3.** Answer questions in formal and informal situations

II. INFORMATIONAL READING

3 2 1 0 **1.** Use basic research techniques
3 2 1 0 **2.** Select appropriate reading method for a particular situation (e.g., skimming, scanning, speed-reading, and in-depth reading

III. WRITTEN COMMUNICATIONS

3 2 1 0 **1.** Use acceptable standards for grammar, mechanics, and word usage
3 2 1 0 **2.** Write coherent instructions, descriptions, summaries, and reports using appropriate formats
3 2 1 0 **3.** Write formal and informal reports using suitable format supported by appropriate graphic aids

MATHEMATICAL SKILLS AND CONCEPTS

IV. OPERATIONS

3 2 1 0 **1.** Solve problems that involve whole numbers, decimals, and fractions including use of appropriate conversions when necessary (e.g., fractions to decimals or decimals to fractions)
3 2 1 0 **2.** Solve problems that involve percents, ratios, and proportions including use of appropriate conversions when necessary (e.g., decimals to percents, percents to decimals, or ratios to percents)

V. ALGEBRA

3 2 1 0 **1.** Construct and solve an algebraic equation for a given problem
3 2 1 0 **2.** Identify multiple applications for using algebraic equations to solve problems

VII. MEASUREMENTS

3 2 1 0 **1.** Estimate and convert American units of measurements (length, volume, and weight) to metric measurements and vice versa

VIII. STATISTICS AND PROBABILITY

3 2 1 0 **1.** Construct, read, and interpret tables, charts, and graphs